

PATENT SPECIFICATION

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(19)



(54) IMPROVEMENTS IN OR RELATING TO SPECTACLES

(71) I, ALBERT THOMAS DOWIE, a British Subject of 32, Sutton Way, Heston, Hounslow, Middlesex, England, do hereby declare the invention for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to spectacles.

According to this invention there is provided a spectacle frame comprising a lens carrier which defines two apertures, each aperture being adapted to accommodate a respective spectacle lens, one arm hinged to one end of the lens carrier so as to be movable pivotally between the folded position, in which it lies along one side of the lens carrier and extends across the two apertures, and the extended position adopted during use, and another arm which is mounted pivotally at the other end of the lens carrier so as to be movable pivotally relative to the lens carrier in a plane normal to the lens carrier between the extended position adopted during use and another extended position on the other side of the lens carrier and which also is hinged to the lens carrier so as to be movable pivotally between the other extended position and the folded position in which it lies along the side of the lens carrier opposite to the folded position of said one arm and extends across the two apertures, wherein the dimensions of the arms are such that the ends of the two apertures which open into said one side of the lens carrier are closed substantially by said one arm in its folded position, and the other ends of the two apertures which open into the opposite side of the lens carrier are closed substantially by the other arm in its folded position.

Preferably said one side and the opposite side of the lens carrier are parallel flat faces and the face of each arm which abuts a respective one of said flat faces in the folded position is flat also. Thus a lens accommodated in an aperture of the lens carrier is enclosed substantially completely

by the lens carrier and the two arms when the two arms are in their folded positions. 50

Preferably the lens carrier and the two arms are substantially rectangular. Each lens carrier end portion to which the respective arm is hinged may be arranged to define the adjacent peripheral portion of the respective aperture, and may be separable from the central portion of the lens carrier to enable the lens to be slid sideways into the respective aperture. 55

The end of each arm remote from the respective hinge may be provided with a rubber stop which serves to grip the side of the head of a person wearing the spectacles. Each rubber stop may be arranged to engage the end of the lens corner remote from the respective hinge so that the arms are held in their folded position by friction. 60

One embodiment of this invention will be described now by way of example only with reference to the accompanying sketches of which:— 65

Figure 1 is a perspective view of a pair of spectacles designed for use by a right handed person; and 70

Figure 2 is a plan view of the spectacles of Figure 1 in their folded condition. 75

The spectacles comprise a substantially rectangular lens carrier 10 and two substantially rectangular arms 11 and 12. 80

The lens carrier 10 comprises a central portion 13 which is recessed at 14 in one of its longer edges so as to define a nose bridge. One pair of parallel projections 15 and 16 extend from the central portion 13 and another pair of parallel projections 17 and 18 extend in the opposite direction from the central portion 13. One end portion 19 is secured releasably to the ends of said one pair of parallel projections 15 and 16 remote from the central portion 13. Another end portion 20 is secured releasably to the ends of the other pair of parallel projections 17 and 18 remote from the central portion 13. Each of the two end portions 19 and 20 co-operates with the respective pair of parallel projections 15 and 16, or 17 and 18 to define 85 90 95

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a respective aperture 21 or 22 which extends between and opens into the opposite side faces 23 and 24 of the lens carrier 10. The pair of opposite side faces 23 and 24 are flat.

5 The arm 11 is hinged to the end portion 19 so as to be movable pivotally from the extended position adopted in use (which is shown in Figure 1 of the drawings) to the folded position (See Figure 2) in which it abuts the side face 23. The face of the rectangular arm 11 which abuts the flat side face 23 is flat.

10 The arm 12 is hinged to an intermediate member 25 which is pinned to the end portion 20. Thus the arm 12 and the intermediate member 25 can be rotated relative to the lens carrier 10 in a plane which is normal to the lens carrier 10, so that the arm 12 can be moved pivotally from the extended position adopted in use, and illustrated in Figure 1 of the drawings, to an extended position on the other side of the lens carrier 10. The arm 12 also can be moved pivotally from the extended position on said other side of the lens carrier 10 to the folded position in which it abuts the side face 24 (See Figure 2). The face of the rectangular arm 12 which abuts the flat side face 24 is flat.

15 The length of the shorter side of the side faces 23 and 24 of the rectangular lens carrier 10 is equal to the length of the corresponding shorter sides of the rectangular arms 11 and 12. Thus, when the two arms 11 and 12 are in the folded position, they co-operate with the lens carrier 10, which is sandwiched between them, to define a substantially rectangular block. The spectacles may be carried readily in a pocket when folded and need not be stored within a special case. The necessary protection is afforded by the arms 11 and 12. The spectacles may be provided with a clip similar to the kind of clip provided on fountain pens, so that the spectacles can be clipped in a pocket.

20 The arms 11 and 12 may be longer than the lens carrier 10, and the ends of the arms 11 and 12 remote from the respective hinges may carry rubber stops 26, 27 for engagement with the temples of a person who wears the spectacles. The rubber stop 26 may be arranged to engage the intermediate member 25 frictionally, and the rubber stop 27 may be arranged to engage the end portion 19 frictionally so that the arms 11 and 12 can be held in the folded position by friction.

25 In order to insert a lens into each aperture 21 or 22, the respective releasable end portion 19 or 20 is separated from the central portion 13 and the lens is slid sideways into position within the aperture 21 or 22.

30 The components of the spectacle frame

may be formed as plastics mouldings.

The design of spectacles described above with reference to the accompanying drawings is applicable particularly to the narrow or "half-eye" type of spectacles designed specifically for use as reading spectacles.

It will be understood that the arm 12, which is hinged to the lens carrier 10 via the intermediate member 25, is the arm which is located on the right hand side of the head in use of the spectacles. The intermediate member 25 would be positioned at the other end of the lens carrier 10 in a pair of spectacles designed for use by a left handed person.

It is not essential that the various components of the spectacles be rectangular, nor is it essential that the mating faces of the arms and the lens carrier be flat. It is preferable, however, that the portions of the arms and the lens carrier which abut one another define straight lines.

WHAT I CLAIM IS:—

1. A spectacle frame comprising a lens carrier which defines two apertures, each aperture being adapted to accommodate a respective spectacle lens, one arm hinged to one end of the lens carrier so as to be movable pivotally between the folded position, in which it lies along one side of the lens carrier and extends across the two apertures, and the extended position adopted during use, and another arm which is mounted pivotally at the other end of the lens carrier in a plane normal relative to the lens carrier in a plane normal to the lens carrier between the extended position adopted during use and another extended position on the other side of the lens carrier and which also is hinged to the lens carrier so as to be movable pivotally between the other extended position and the folded position in which it lies along the side of the lens carrier opposite to the folded position of said one arm and extends across the two apertures, wherein the dimensions of the arms are such that the ends of the two apertures which open into said one side of the lens carrier are closed substantially by said one arm in its folded position, and the other ends of the two apertures which open into the opposite side of the lens carrier are closed substantially by the other arm in its folded position.

2. A spectacle frame as claimed in Claim 1, wherein said one side and the opposite side of the lens carrier are parallel flat faces and the face of each arm which abuts a respective one of said flat faces in the folded position is flat also.

3. A spectacle frame as claimed in Claim 1 or Claim 2, wherein the lens carrier and the two arms are substantially rectangular.

4. A spectacle frame as claimed in Claim 130

3, wherein the lens carrier end portion to which the respective arm is hinged is arranged to define the adjacent peripheral portion of the respective aperture, and is
5 separable from the central portion of the lens carrier to enable the lens to be slid sideways into the respective aperture.

10 5. A spectacle frame as claimed in any preceding claim, wherein the end of each arm remote from the respective hinge is provided with a rubber stop which serves to grip the side of the head of a person wearing the spectacles.

6. A spectacle frame as claimed in Claim 5, wherein each rubber stop is arranged to engage the end of the lens carrier remote from the respective hinge so that the arms are held in their folded position by friction. 15

7. A spectacle frame substantially as described hereinbefore with reference to and as illustrated in the accompanying drawing. 20

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Fig.1.

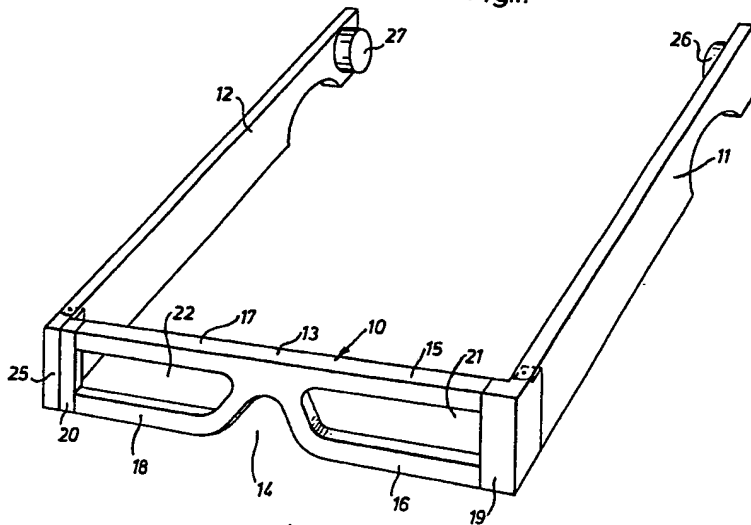


Fig.2.

